

## Work Order ID 72405

Monday, July 25, 2011 11:10:29 AM

SHIP JULY 27



Page 1

Item ID: D3315-1

Accept



Setup Start



Revision ID:

Item Name: Wearplate

Stop



Start Date: 7/25/2011 Start Qty: 2.00



Cust Item ID:

Required Date: 7/26/2011 Req'd Qty: 2.00



Customer:

Reference:

Approvals:

Process Plan:

Date: 11/07/25 Tooling:

Date:

Run Start



QC:

Date: SPC (Y/N):

Date:

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D3315	Rev B

100



FLOW WATER JET

0.00

Waterjet

FLOW CNC Waterjet

Memo

1-Cut as per Dwg D3315  Dwg Rev: B  Prog Rev: B  2-  
Deburr if necessary

110



QC2- Inspect parts off machine FAI/FAIB

0.00

QC

Quality Control

Memo

0.00

120



QC8- Inspect parts - second check

0.00

QC

Quality Control

Memo

0.00

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

**Work Order ID 72405**

Monday, July 25, 2011 11:10:29 AM



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<b>Item ID:</b>	D3315-1	<b>Accept</b>		<b>Setup</b>	<b>Start</b>		
<b>Revision ID:</b>							
<b>Item Name:</b>	Wearplate				<b>Stop</b>		
<b>Start Date:</b>	7/25/2011	<b>Start Qty:</b> 2.00		<b>Cust Item ID:</b>			
<b>Required Date:</b>	7/26/2011	<b>Req'd Qty:</b> 2.00		<b>Customer:</b>			
<b>Reference:</b>							
<b>Approvals:</b>	<b>Process Plan:</b> _____	<b>Date:</b> _____	<b>Tooling:</b> _____	<b>Date:</b> _____	<b>Run</b>	<b>Start</b>	
	<b>QC:</b> _____	<b>Date:</b> _____	<b>SPC (Y/N):</b> _____	<b>Date:</b> _____		<b>Stop</b>	

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 	Small Fab	0.00							
Small Fab	Memo	0.00							
Small Fab	Deburr if necessary		N/A						
140 	NC BRAKE	0.00							
Brake NC	Memo	0.00							
Brake NC	1- Form using DT8751 Die as per Dwg D3315Rev: <u>B</u> <input type="checkbox"/> 2- Form using DT8179 Die and form joggle using DT8157 as per Dwg D3315Rev: <u>A</u>		SB	1107/26	(2)				
150 	QC6- Inspect dimensions to drawing	0.00							
QC	Memo	0.00							
Quality Control									

11 07 26 (2)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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**Work Order ID 72405**

Monday, July 25, 2011 11:10:29 AM



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Item ID: D3315-1

Revision ID:

Item Name: Wearplate

Start Date: 7/25/2011 Start Qty: 2.00

Required Date: 7/26/2011 Req'd Qty: 2.00

Accept



Setup Start



Stop



Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

160



Large Fab

0.00

EL 11-7-26 (2)

Large Fab

Memo

0.00

Weld hard surface using D3315-1T3 as per QSI 004 and Dwg D3315 Rev:

  Qty Part Number Description Batch A/R  
 N/A 7560 Hardcoat Rod M11713

170



QC10- Inspect visual per QSI004- ground welds

0.00

DA 11.07.26 (1)

QC

Quality Control

180



Memo

0.00

11 07 26 (2)

QC

Quality Control

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes  No  DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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**Work Order ID 72405**

Monday, July 25, 2011 11:10:29 AM



Page 4

Item ID: D3315-1

Accept



Setup Start



Revision ID:

Item Name: Wearplate

Stop



Start Date: 7/25/2011 Start Qty: 2.00



Cust Item ID:

Required Date: 7/26/2011 Req'd Qty: 2.00



Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_

Date: \_\_\_\_\_

Tooling: \_\_\_\_\_

Date: \_\_\_\_\_

Run Start



QC: \_\_\_\_\_

Date: \_\_\_\_\_

SPC (Y/N): \_\_\_\_\_

Date: \_\_\_\_\_

Stop

Sequence ID/  
Work Center ID

190



Powdercoat

Powder Coating

Operation  
Description

Grey Sandtex(Ref.4.3.5.6) per QSI005 4.3

Set Up/  
Run Hours

0.00

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

M117338.

Memo

0.00

START TIME:

9:00

OVEN TEMPERATURE:

FINISH TIME:

9:30

2 0 6 11-7-27.

200



QC

Quality Control

QC3- Inspect Part Finish

0.00

Memo

0.00

2 6 11-7-27

210



Packaging

Packaging

0.00

Memo

0.00

117338

Identify on inside surface using a permanent fine point marker with the  
following:TCCA-PDA, Dart Aerospace Ltd.P/N: D3315-1, B/N:  
BXXXXXXFor Product Eligibility see PDA04-17and  
StockLocation: 496

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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**Work Order ID 72405**

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Setup

Start



Revision ID:

Item Name: Wearplate

Stop



Start Date: 7/25/2011 Start Qty: 2.00



Cust Item ID:

Required Date: 7/26/2011 Req'd Qty: 2.00



Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/  
Work Center ID

220



QC

Quality Control

Operation  
Description

QC21- Final Inspection - Work Order Release

Set Up/  
Run Hours

0.00

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

Memo

0.00

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
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NOTE: Date & initial all entries

# Picklist Print

Monday, July 25, 2011 11:10:34 AM

Page 1

Work Order ID: 72405



Parent Item: D3315-1



Parent Item Name: Wearplate

Start Date: 7/25/2011

Required Date: 7/26/2011

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP: A□05.05.12□New issue□KJ/JLM  
IPP Rev:B As per Rev B 06-03-24 JLM□  
IPP Rev:C now water jet 07-12-06 DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M1010S16GA  1010/1025 sheet 16GA		Purchased		No		100	sf	150.5000	1.695	3.53125			

Location	Loc Qty	Loc Code
MAT019	150.5	
116791	32.5	
117500	118	

4.0 80 11/07/28

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order:	72405
Description: Wearplate		Part Number:	D3315-1
Inspection Dwg: D3315 Rev: B		Page 1 of 1	

### FIRST ARTICLE INSPECTION CHECKLIST

First Article     Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.266 x 0.450	+0.006/-0.001 x +/-0.010	Ø268X453	—		RAZB	Jern
4.402	+/-0.010	4.405	—		"	
4.137	+/-0.010	4.145	—		"	
3.550	+/-0.010	3.560	—		"	
5.464	+/-0.010	5.464	—		"	
5.214	+/-0.010	5.206	—		"	
1.224	+/-0.010	1.227	—		"	
2.57	+/-0.030	2.578	—		"	
6.273	+/-0.010	6.275	—		"	Jern
8.224	+/-0.010	8.231	—		RA04	TAP
9.515	+/-0.010	9.515	—		"	
11.429	+/-0.010	11.430	—		"	
15.474	+/-0.010	15.475	—		"	
16.379	+/-0.010	16.380	—		"	
21.360	+/-0.010	21.360	—		"	
23.474	+/-0.010	23.475	—		"	
26.273	+/-0.010	26.275	—		"	
29.42	+/-0.030	29.42	—		"	
0.060	+/-0.010	0.061	—		RAZB	Jern
Ø0.300	+0.006/-0.001	.303	—		"	"

Measured by:		Audited by:		Prototype Approval:	N/A
Date:	11/07/25	Date:	11.07.25	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	09.09.28	New Issue	KJ	

W/O:

## WORK ORDER CHANGES

DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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NOTE: Date &amp; initial all entries

UNCONTROLLED COPY

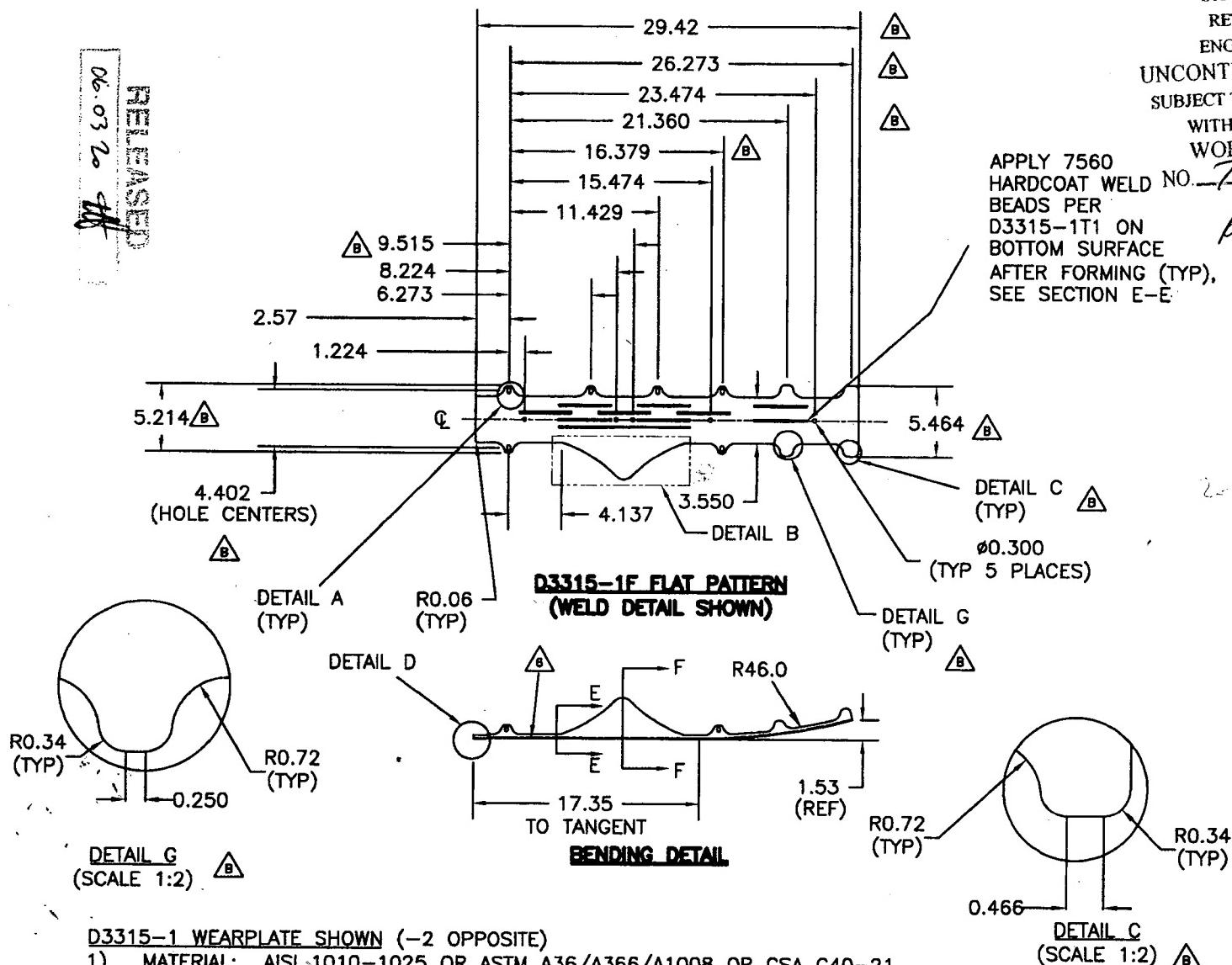
SHOP COPY  
RETURN TO  
ENGINEERING  
SUBJECT TO AMENDMENT

WITHOUT NOTICE  
WORK ORDER

PL11-0725



DESIGN PH	DRAWN BY PH	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	REV. B
CHECKED	APPROVED	DRAWING NO.	SHEET 1 OF 4
DATE		TITLE	SCALE
A	04.09.10	NEW ISSUE	
B	06.01.31	WEARPLATE UPDATE DIMENSIONS	1:12



D3315-1 WEARPLATE SHOWN (-2 OPPOSITE)

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A1008 OR CSA G40-21,  
38W/44W/50W/60W/70W SERIES STEEL 16 GAUGE (0.060 THICK)
- 2) FINISH: POWDER COAT GREY SANTEX (REF.4.3.5.6) PER DART QSI 005 4.3
- 3) WELD PER DART QSI 004
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES
- 6) IDENTIFY ON INSIDE SURFACE AS INDICATED  
"TCCA-PDA, DART AEROSPACE LTD., P/N D3315-X  
B/N BXXXXX, FOR PRODUCT ELIGIBILITY SEE PDA05-17"

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

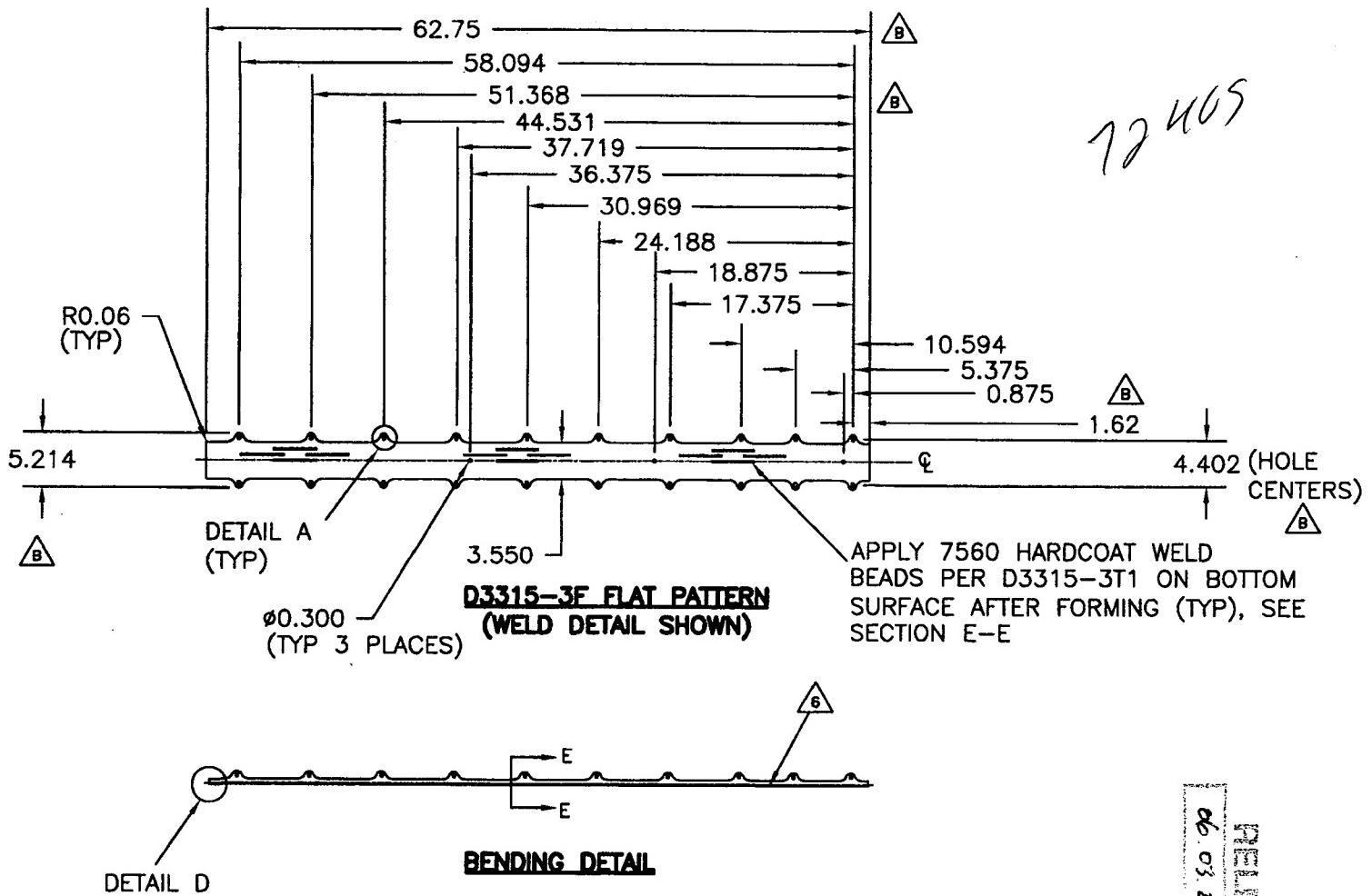
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

**DART**

DESIGN	P/H	DRAWN BY	P/H	DART AEROSPACE LTD
CHECKED	<i>H</i>	APPROVED	<i>H</i>	HAWKESBURY, ONTARIO, CANADA
DATE	06.01.31	DRAWING NO.	D3315	REV. B
TITLE	WEARPLATE	SCALE	1:6	SHEET 2 OF 4



D3315-3 WEARPLATE SHOWN (-4 OPPOSITE)

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A1008 OR CSA G40-21, 38W/44W/50W/60W/70W SERIES STEEL 16 GAUGE (0.060 THICK)
- 2) FINISH: POWDER COAT GREY SANTEX (REF.4.3.5.6) PER DART QSI 005 4.3
- 3) WELD PER DART QSI 004
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES
- 6) IDENTIFY ON INSIDE SURFACE AS INDICATED  
"TCCA-PDA, DART AEROSPACE LTD., P/N D3315-X  
B/N BXXXXX, FOR PRODUCT ELIGIBILITY SEE PDA05-17"

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

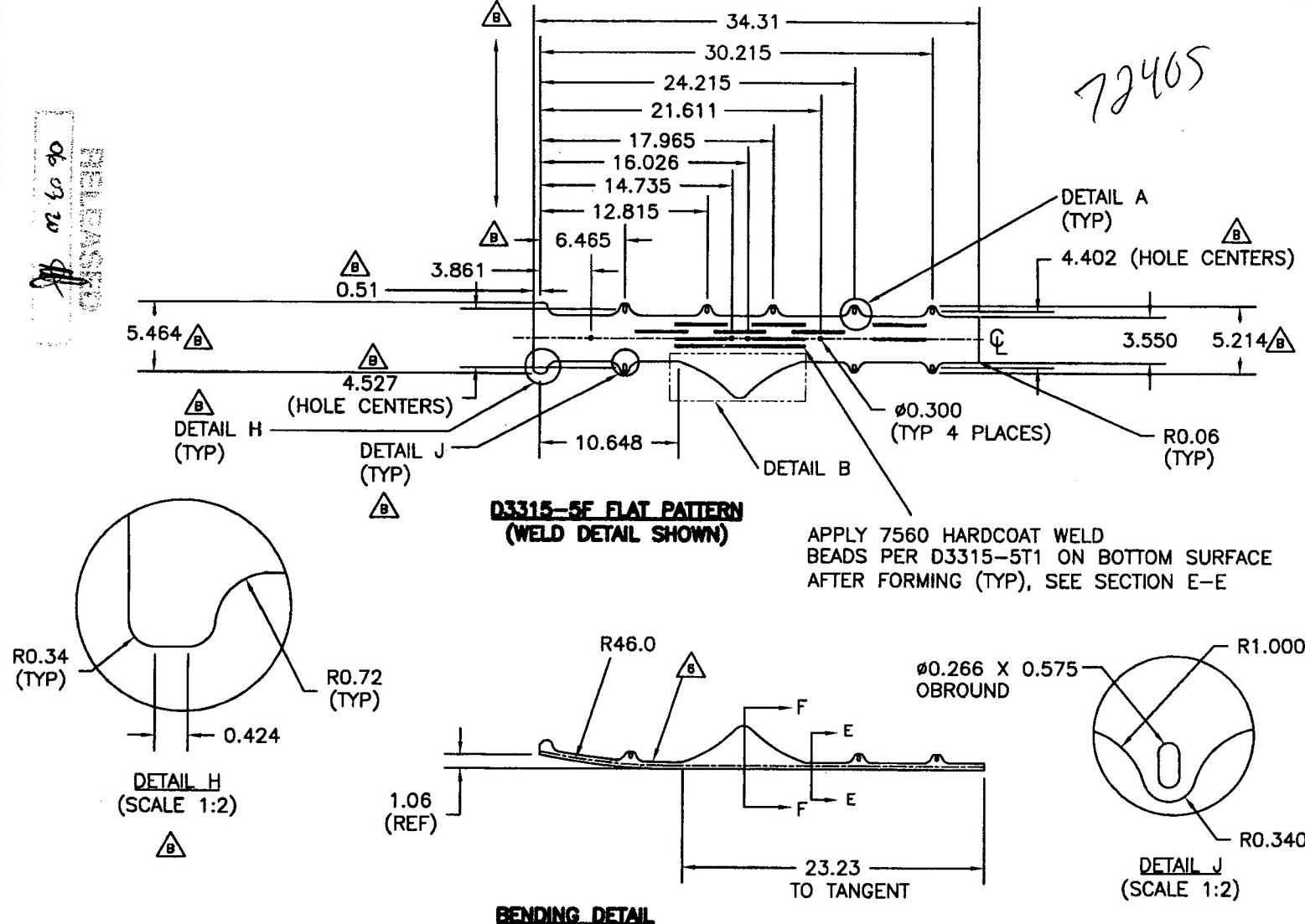
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

**DART**

DESIGN P/H	DRAWN BY P/H	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3315
DATE 06.01.31	TITLE	SHEET 3 OF 4 SCALE 1:12



- D3315-5 WEARPLATE SHOWN (-6 OPPOSITE)**
- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A1008 OR CSA G40-21, 38W/44W/50W/60W/70W SERIES STEEL 16 GAUGE (0.060 THICK)
  - 2) FINISH: POWDER COAT GREY SANTEX (REF.4.3.5.6) PER DART QSI 005 4.3
  - 3) WELD PER DART QSI 004
  - 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 5) ALL DIMENSION ARE IN INCHES
  - 6) IDENTIFY ON INSIDE SURFACE AS INDICATED  
"TCCA-PDA, DART AEROSPACE LTD., P/N D3315-X  
B/N BXXXXX, FOR PRODUCT ELIGIBILITY SEE PDA05-17"

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

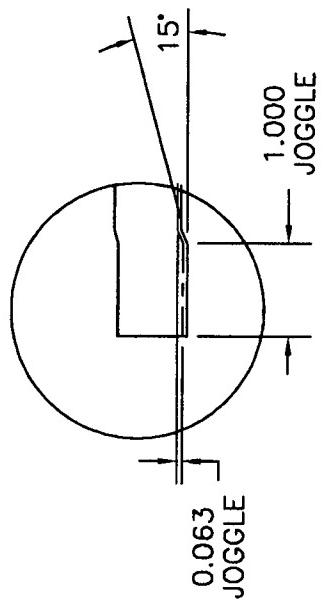
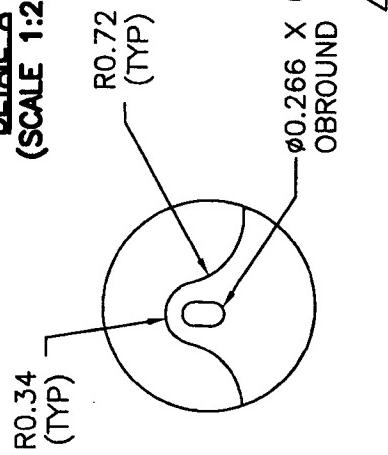
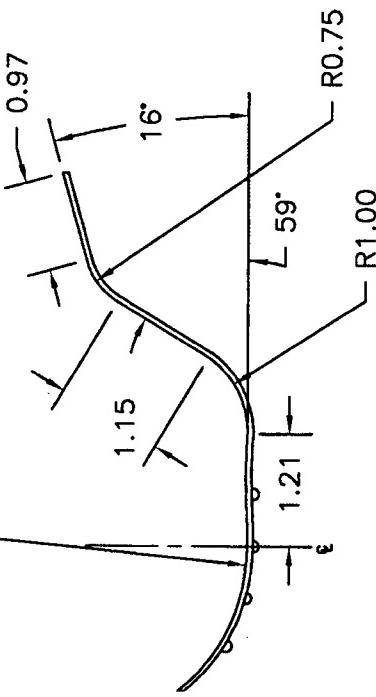
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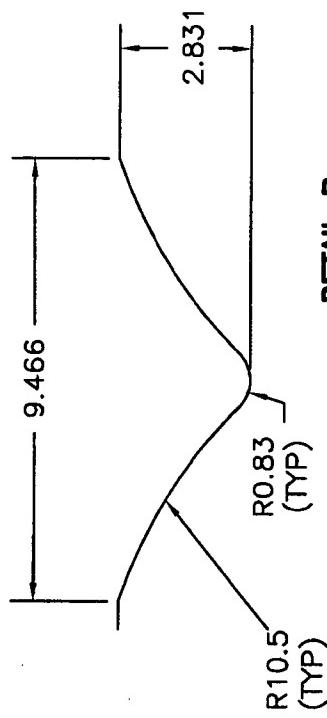
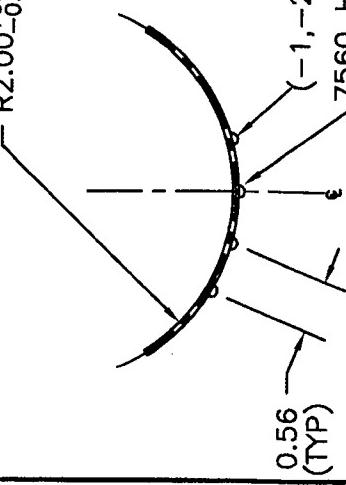
**DART**

DESIGN PH	DRAWN BY PH	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3315	REV. B SHEET 4 OF 4
DATE 06.01.31		TITLE WEARPLATE	SCALE NTS

19465

**DETAIL A  
(SCALE 1:2)****DETAIL D  
(SCALE 1:2)**R2.00<sup>+0.000</sup><sub>-0.000</sub>**SECTION E-E  
(SCALE 1:2)**

B

R2.00<sup>+0.030</sup><sub>-0.000</sub>**SECTION E-E  
(SCALE 1:2)**

RELEASER  
06.03.20

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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